

EXCEL-100

eldrotec

-70°C to 170°C
-40°C @ 90W

Benchtop Active Thermal Forcing System

Precision Temperature Control for Semiconductor & Electronics Validation



-70°C to +170°C



±0.1°C



-40°C @ 90W



Precision Control



Ramping Control



Advanced 7" Touch HMI



19" Rack Compatible
Optional

The **EXCEL-100** is specifically engineered for Active Temperature Forcing of IC's devices,. Unlike standard cooling solutions, our system maintains a rock-solid, stable temperature setpoint even when the DUT operates at peak electrical loads.

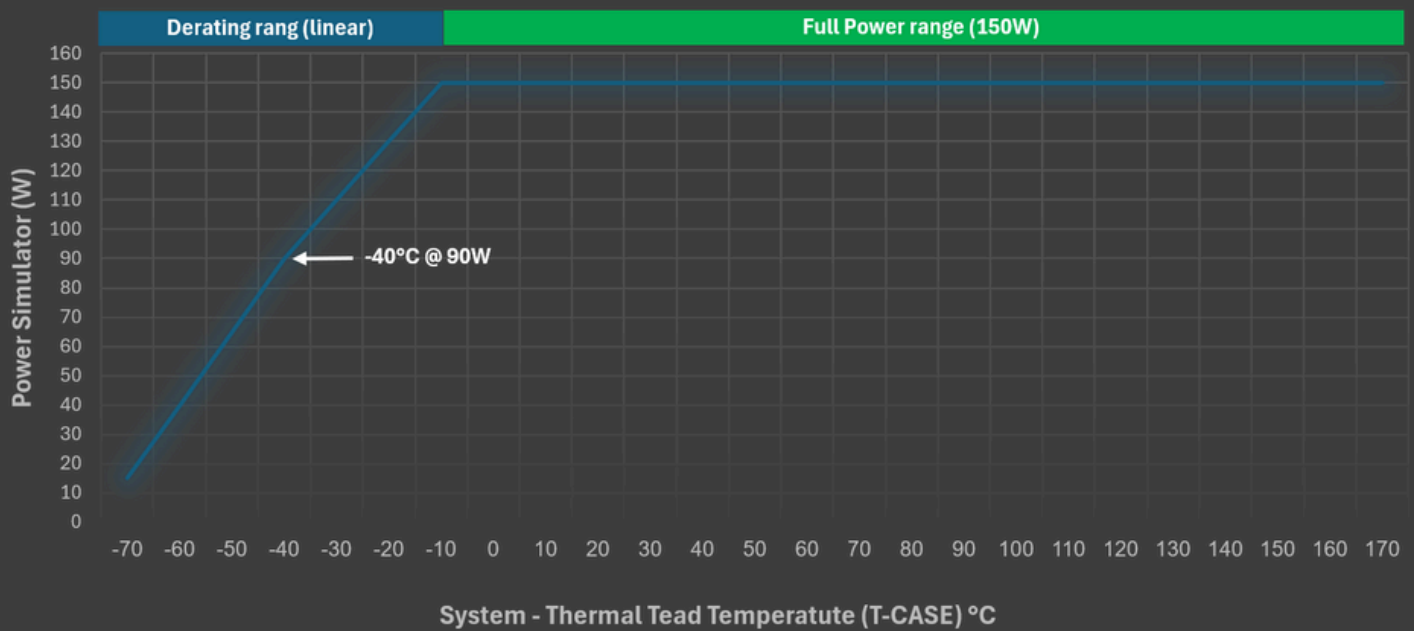
- Load Handling: capable of stabilizing DUT temperature with an internal power dissipation.
- Active Power Compensation: Specifically optimized to counteract Low heat loads, maintaining precise stability of ±0.1°C.
- Extreme Temperature Range: Reliable performance from -70°C to +170°C.
- Superior Cooling Efficiency: Achieving -40°C @ 90W for the most demanding thermal characterization processes.



Eldrotec Ltd. - 31 Hans Moller str - Kiryat Bialik, Israel
+972-4-6893080 | info@eldrotec.com | www.eldrotec.com

Performance Analysis & Technical Specifications

EXCEL-100 Thermal Performance



Operating

Temperature range	-70°C to +170°C
Temperature stability	±0.1°C
Transition rates	Up to 75°C/min
Temperature sensor types	PT100 thermistor
Programmable Force-Controlled Actuation	Up to 150 Kg Optional Custom

Facilities

Power	100-230 / 208-230 VAC 50/60Hz
Customer CDA [Recommended] To prevent condensation	<0.5cfm @ 90PSI -70°C dew point
Ambient Operating temperature	-10°C to 35°C

Mechanical Data

System size WxHxL (mm)	410 x 320 x 580
System weight (Kg)	~50
DUT Dimensions (mm)	Optional Up to 70X70
Controller to Thermal Head distance	~2 meter (Optional to custom)
Rack Compatibility	19" Rack Compatible Optional

Communication and Control

Ethernet Full Automation	TCP/IP RJ-45
USB	Optional
Touch screen display	Advanced 7" Touch HMI

Programmable Force-Controlled Actuation

- Integrated CDA-Driven Mechanism:** High-precision pneumatic actuator for consistent and repeatable pressing cycles. Dynamic
- Coupling Optimization:** Ensures ideal electrical and thermal contact for Socketed Devices and maximizes heat transfer for Soldered Devices.
- Safety & Precision:** Protects delicate PCBs and semiconductor packages from mechanical stress.

